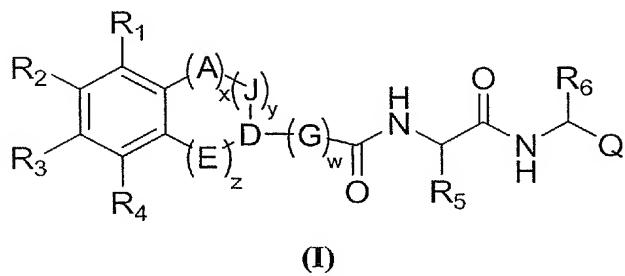


Listing of the Claims

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in the application.

1. **(Currently Amended)** A compound having the structure (I):



(I)

or pharmaceutically acceptable derivative thereof;

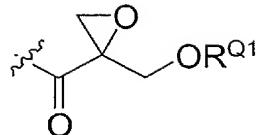
wherein each occurrence of A, J, E, D and G is independently CR_A, CR_AR_B, C=O, O, S, NR_A, or N, wherein each occurrence of R_A and R_B is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety;

A and J, J and D, D and E, and D and G are each independently linked by a single or double bond as valency permits;

w, x, y and z are each independently 0, 1, 2, 3, 4, 5 or 6, but the sum of x, y and z is 2-6 and the sum of x and y is 1-6;

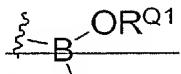
R₁, R₂, R₃ and R₄ are each independently hydrogen, halogen, -CN, -OR_C, -SR_C, -NR_CR_D, -(C=O)R_C or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, wherein each occurrence of R_C and R_D is independently hydrogen, a protecting group, or an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or R_C and R_D, taken together, form a heteroalicyclic or heteroaryl moiety; or wherein any two adjacent groups R₁, R₂, R₃ and R₄, taken together, form an alicyclic or heteroalicyclic moiety, or an aryl or heteroaryl moiety;

R₅ and R₆ are each independently an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety; and



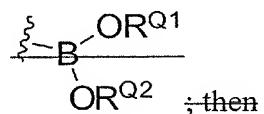
Q is an epoxycarbonyl moiety having the structure:

, or a boron-



containing moiety having the structure: $\text{---} \begin{array}{c} \xi \\ | \\ \text{---} \text{B} \text{---} \\ | \\ \text{---} \text{OR}^{\text{Q}1} \\ \xi \\ \text{---} \text{OR}^{\text{Q}2} \end{array} \text{---}$; wherein wherein R^{Q1} and R^{Q2} are each independently is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or an oxygen protecting group, or R^{Q1} and R^{Q2}, taken together, form a heteroalicyclic moiety; or, when Q is an epoxycarbonyl moiety, R^{Q1} may also be or a prodrug moiety;

with the proviso that, when Q is a boron-containing moiety having the structure

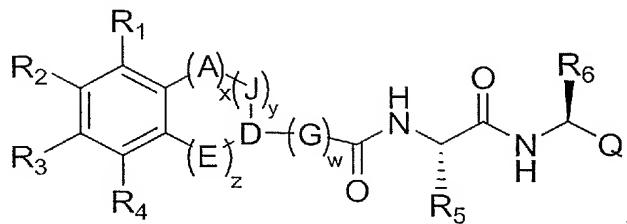


; then

- (i) — is not — — where R^X is aryl or heteroaryl and R^Y is aryl, heterocyclic, alkylcarbonyl or heterocyclicalkylcarbonyl;
- (ii) — if D is N or CH, and (a) w is 0, or (b) w is 1 and G is $\text{---CH(OH)}\text{---CH}_2$, then neither occurrence of J or E attached to D, nor the occurrence of A attached to D when y is 0, is a nitrogen atom substituted with hydrogen or a nitrogen protecting group typically employed in peptide synthesis;
- (iii) — when w is other than 0, then the occurrence of G attached to D is not N or CH substituted with NR^XR^Y where R^X is hydrogen or alkyl and R^Y is hydrogen or a nitrogen protecting group typically employed in peptide synthesis; and/or

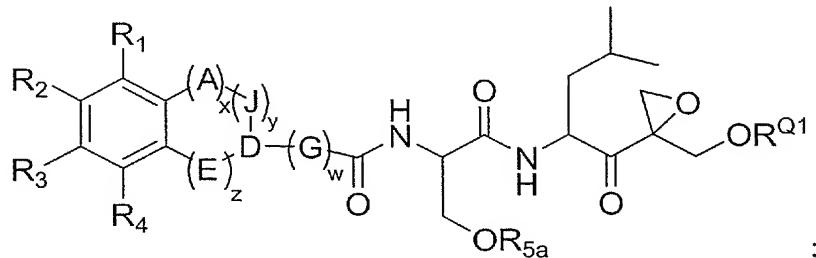
- (iv) — is not — ; wherein Z¹ is O or S.

2. **(Original)** The compound of claim 1, wherein the compound has the structure:



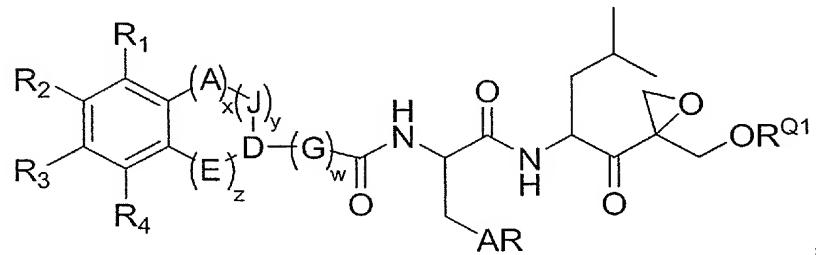
3-4. **(Canceled).**

5. **(Previously Presented)** The compound of claim 1, wherein R₅ is -CH₂OR_{5a} and the compound has the structure:



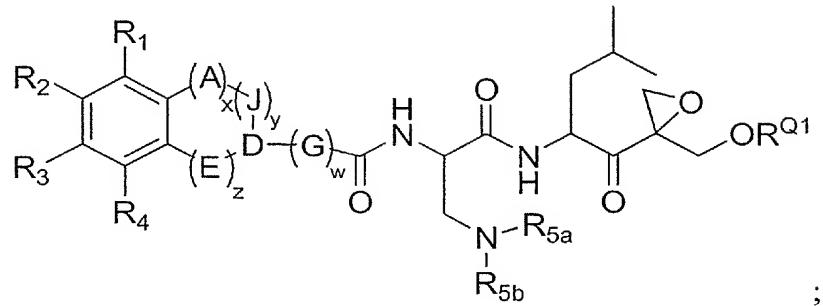
wherein R_{5a} is hydrogen, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, an oxygen protecting group or a prodrug moiety.

6. **(Previously Presented)** The compound of claim 1, wherein R₅ is aryl or heteroaryl and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety.

7. **(Previously Presented)** The compound of claim 1, wherein R₅ is -CH₂NR_{5a}R_{5b} or heteroaryl and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug , or R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety.

Claims 8-12. **(Canceled).**

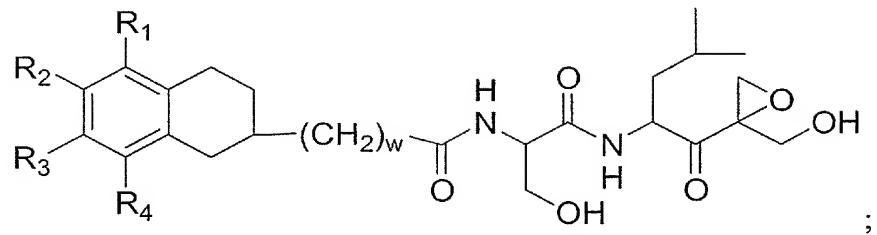
13. **(Previously Presented)** The compound of claim 1, wherein x, y and z are each 1, and A, J, D, and E are each CH₂.

14-15. **(Canceled).**

16. **(Previously Presented)** The compound of claim 1, wherein G is CH₂ and w is 0, 1, or 2.

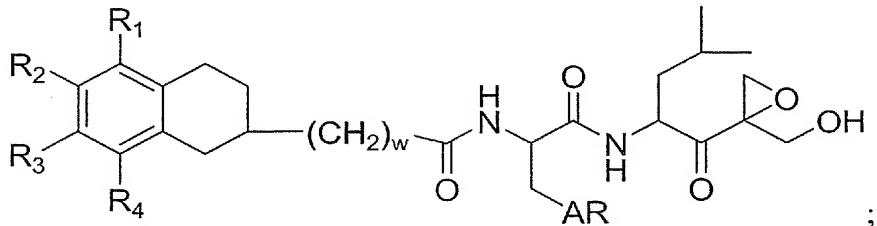
17. **(Previously Presented)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂; G is CH₂ and w is 0, 1, or 2.

18. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



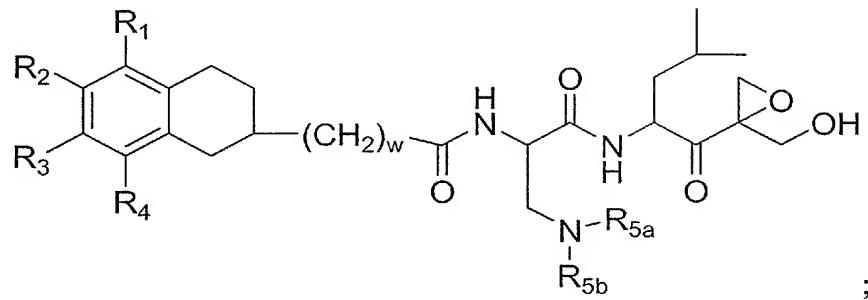
wherein w is 0, 1 or 2; and R₁, R₂, R₃ and R₄ are each independently hydrogen, OR_C, halogen, or NR_CR_D, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

19. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2; and R₁, R₂, R₃ and R₄ are each independently hydrogen, OR_C, halogen, or NR_CR_D, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

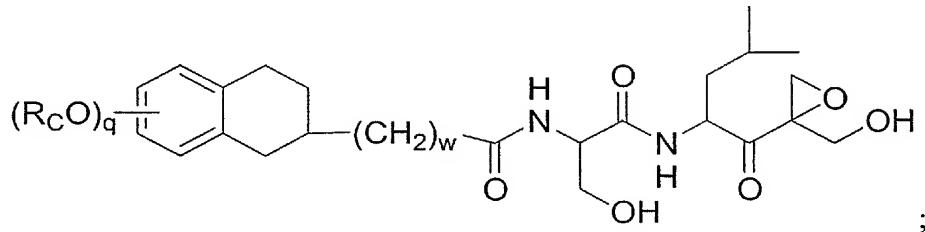
20. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2; and R₁, R₂, R₃ and R₄ are each independently hydrogen, OR_C, halogen, or NR_CR_D, wherein each occurrence of R_C and R_D is independently hydrogen or lower alkyl.

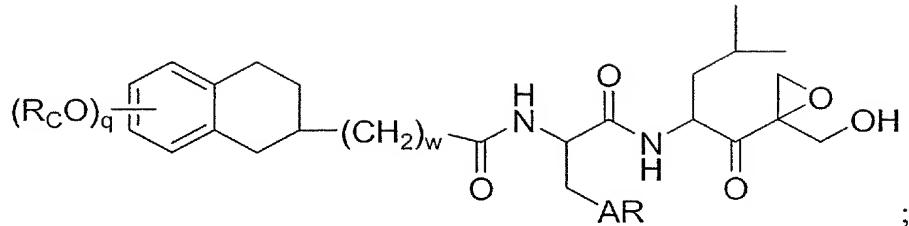
21-23. **(Canceled).**

24. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



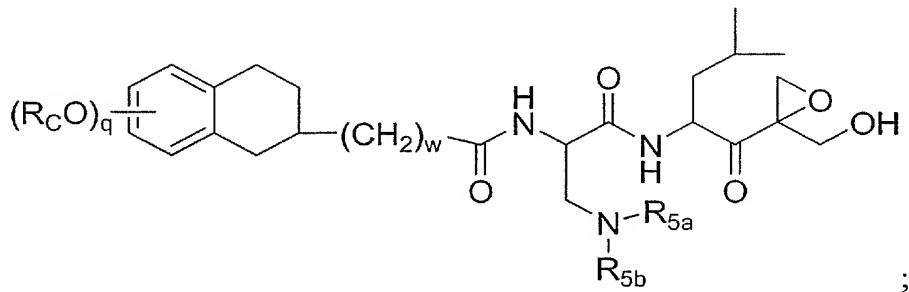
wherein w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

25. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

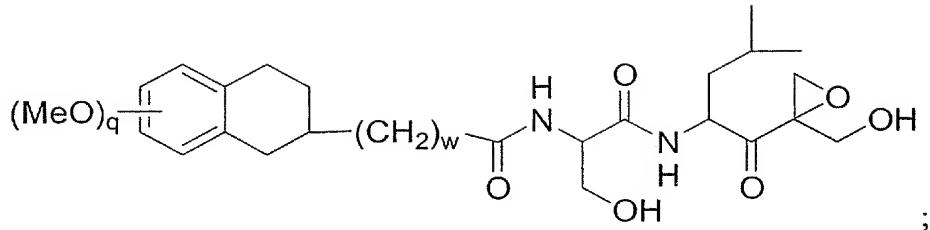
26. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug, or R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2, each occurrence of R_C is independently lower alkyl, and q is 0, 1, 2, 3 or 4.

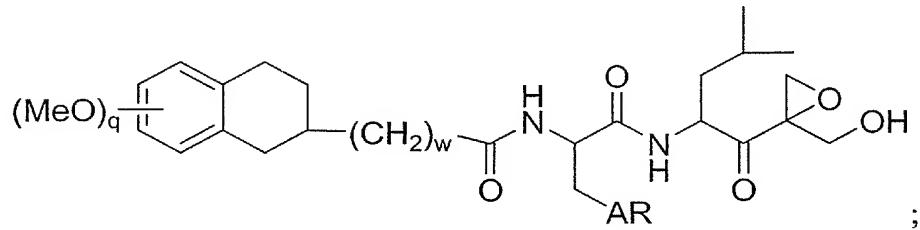
27-29. **(Canceled).**

30. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH₂ and the compound has the structure:



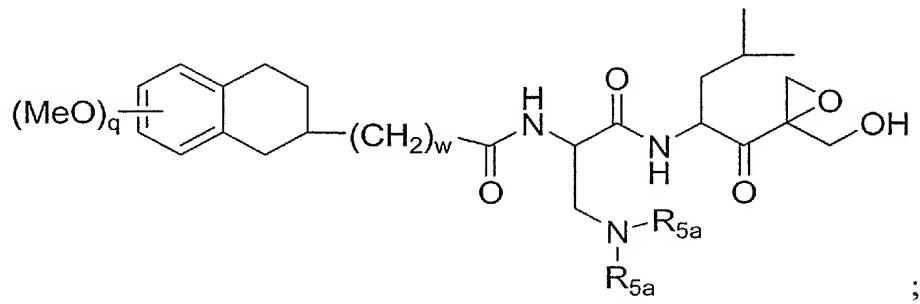
wherein w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

31. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



wherein AR is an aryl or heteroaryl moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

32. **(Original)** The compound of claim 1, wherein x, y and z are each 1; A, J, D, and E are each CH_2 and the compound has the structure:



wherein R_{5a} and R_{5b} are each independently hydrogen, a nitrogen protecting group, an

aliphatic, alicyclic, heteroaliphatic, heteroalicyclic, aryl or heteroaryl moiety, or a prodrug , or R_{5a} and R_{5b}, taken together, form a heteroalicyclic or heteroaryl moiety; w is 0, 1 or 2; and q is 0, 1, 2, 3 or 4.

33-37. **(Cancelled).**

38. **(Currently Amended)** The compound of any one of claims 1, 2, or 5-7, and 10-12, wherein x, y and z are each 1 and A-J-D-E together represent –CH₂-CH₂-CH₂-CH₂-.

39. **(Currently Amended)** The compound of any one of claims 1, 2, or 5-7, and 10-12, wherein x is 0, y and z are each 1 and J-D-E together represent –CH₂-CH₂-CH₂-.

40. **(Currently Amended)** The compound of any one of claims 1, 2, or 5-7, and 10-12, wherein x is 0, z is 0 and E is absent and J-D together represents –CH₂-CH₂-.

41. **(Currently Amended)** The compound of any one of claims 1, 2, or 5-7, and 10-12, wherein x, y and z are each 1 and A-J-D-E together represent –N=CH-CH=N-.

42. **(Currently Amended)** The compound of any one of claims 1, 2, or 5-7, and 10-12, wherein x, y and z are each 1 and A-J-D-E together represent –CH₂-CH₂-CH₂-CH₂- and G is CH₂ and w is 0, 1 or 2.

43. **(Previously Presented)** The compound of claim 1, wherein R₁, R₂, R₃ and R₄ are each independently hydrogen, halogen, protected or unprotected hydroxyl, protected or unprotected thiol, protected or unprotected amino, alkyl, alkoxy, thioalkyl, mono-or di-substituted alkylamino, or wherein any two adjacent groups R₁, R₂, R₃ or R₄, taken together are a cycloalkyl, heterocycloalkyl, aryl or heteroaryl moiety,

whereby each of the alkyl moieties is independently substituted or unsubstituted, linear or branched, cyclic or acyclic, and each of the aryl and heteroaryl moieties is independently substituted or unsubstituted.

44. **(Previously Presented)** The compound of claim 1, wherein R₁, R₂, R₃ and R₄ are each independently hydrogen or lower alkoxy.

45. **(Previously Presented)** The compound of claim 1, wherein R₁, R₂, R₃ and R₄ are each independently hydrogen or methoxy.

46. **(Previously Presented)** The compound of claim 1, wherein R₁, R₂, R₃ and R₄ are each methoxy.

47. **(Previously Presented)** The compound of claim 1, wherein R₁ is hydrogen and each of R₂, R₃ and R₄ are independently lower alkoxy.

48. **(Previously Presented)** The compound of claim 1, wherein R₁ is hydrogen and each of R₂, R₃ and R₄ are methoxy.

49. **(Previously Presented)** The compound of claim 1, wherein R₅ is alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, cycloalkynyl, C₁₋₆OR_{5a}, C₁₋₆NR_{5a}R_{5b}, aryl or heteroaryl; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

50. **(Previously Presented)** The compound of claim 1, wherein R₅ is alkyl, cycloalkyl, -CH₂OR_{5a}, -CH₂NR_{5a}R_{5b}, -CH₂aryl or -CH₂heteroaryl; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

51. **(Previously Presented)** The compound of claim 1, wherein R₅ is alkyl, cycloalkyl, CH₂OR_{5a}, CH₂NR_{5a}R_{5b} or substituted or unsubstituted -CH₂Ph; wherein R_{5a} and R_{5b} are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, -C(NH₂)=N(NO₂), -C(=O)OR_{5c}, -C(=O)R_{5c} or a protecting group; wherein R_{5c} is hydrogen, alkyl, alkenyl, alkynyl, aryl or heteroaryl.

52. **(Previously Presented)** The compound of claim 1, wherein R₅ is -CH₂OH or benzyl.

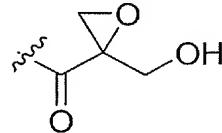
53. **(Previously Presented)** The compound of claim 1, wherein R₆ is alkyl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, cycloalkynyl, aryl or heteroaryl.

54. **(Previously Presented)** The compound of claim 1, wherein R₆ is lower alkyl or aryl.

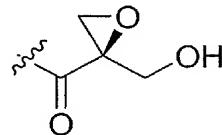
55. **(Previously Presented)** The compound of claim 1, wherein R₆ is -CH₂CH(CH₃)₂.

56. **(Canceled).**

57. **(Previously Presented)** The compound of claim 1, 2, 3 or 4, wherein Q has the structure:



58. **(Previously Presented)** The compound of claim 57, wherein Q has the structure:



59-62. **(Canceled).**

63. **(Previously Presented)** A pharmaceutical composition comprising a compound of claim 1; and

a pharmaceutically acceptable carrier or diluent, and optionally further comprising an additional therapeutic agent.

64. **(Original)** The pharmaceutical of claim 63 wherein the compound is present in an amount effective to exert an antiproliferative and/or anticancer effect.

65. **(Original)** The pharmaceutical of claim 63 wherein the compound and the additional therapeutic agent are present in an amount effective to exert an antiproliferative and/or anticancer effect.

66. **(Original)** The pharmaceutical of claim 63 wherein the compound is present in an amount effective to exert an anti-inflammatory effect.

67. **(Original)** The pharmaceutical of claim 63 wherein the compound and the additional therapeutic agent are present in an amount effective to exert an anti-inflammatory effect.

68. **(Previously Presented)** A method for treating cancer comprising:

administering to a subject in need thereof a therapeutically effective amount of a compound of claim 1; and

optionally further administering an additional therapeutic agent.

69. **(Original)** The method of claim 68, wherein the method is used to treat prostate, breast, colon, bladder, cervical, skin, testicular, kidney, ovarian, stomach, brain, liver, pancreatic or esophageal cancer or lymphoma, leukemia, or multiple myeloma.

70. **(Original)** The method of claim 68, wherein the cancer is a solid tumor.

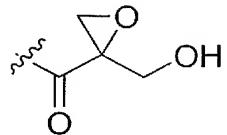
71-77. **(Canceled).**

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Filed: December 20, 2004
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78. **(Currently Amended)** The compound of any one of claims 2, 3 and 71-77, wherein D is absent and z is 0.

79-80. **(Canceled)**.

81. **(Previously Presented)** The compound of any one of claims 2, 3 and 71-77, wherein Q is a moiety having the structure:



82. **(Previously Presented)** The compound of claim 81, wherein Q is a moiety having the structure:

